

Ikuzwe Mbagatuzinde

Healthcare Cost Analysis Action Report

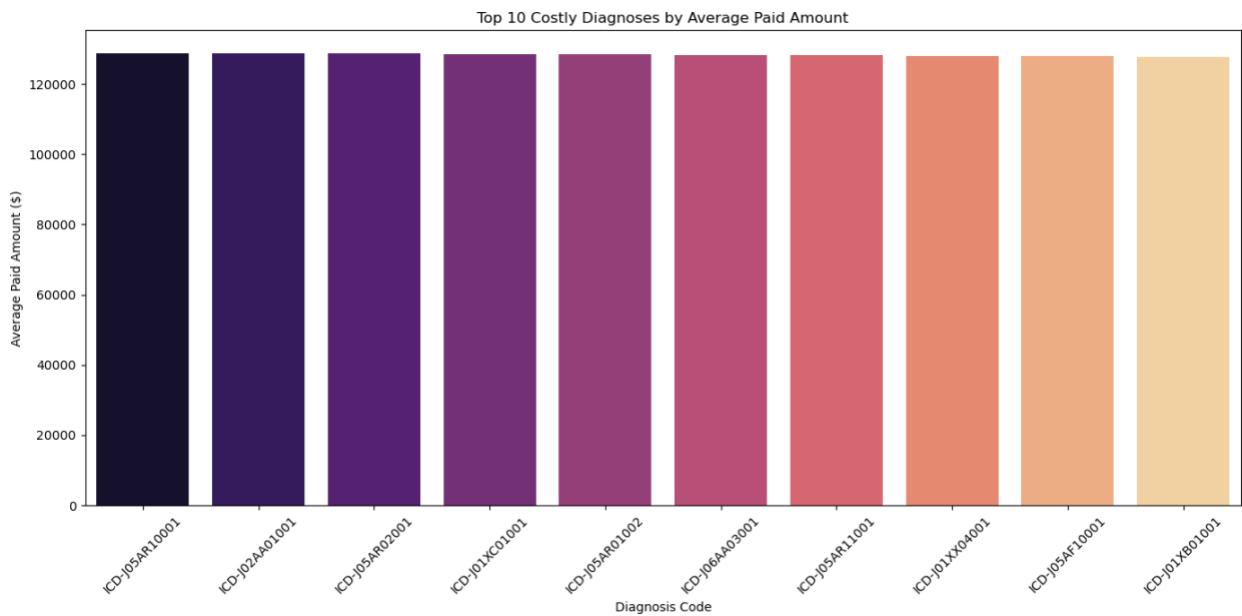
The analysis of healthcare claims data aimed to uncover cost drivers and opportunities for cost reduction. Several insights were gleaned regarding high-cost diagnoses and procedures, cost variations across demographics, potential areas for cost savings, and the least costly medical services.

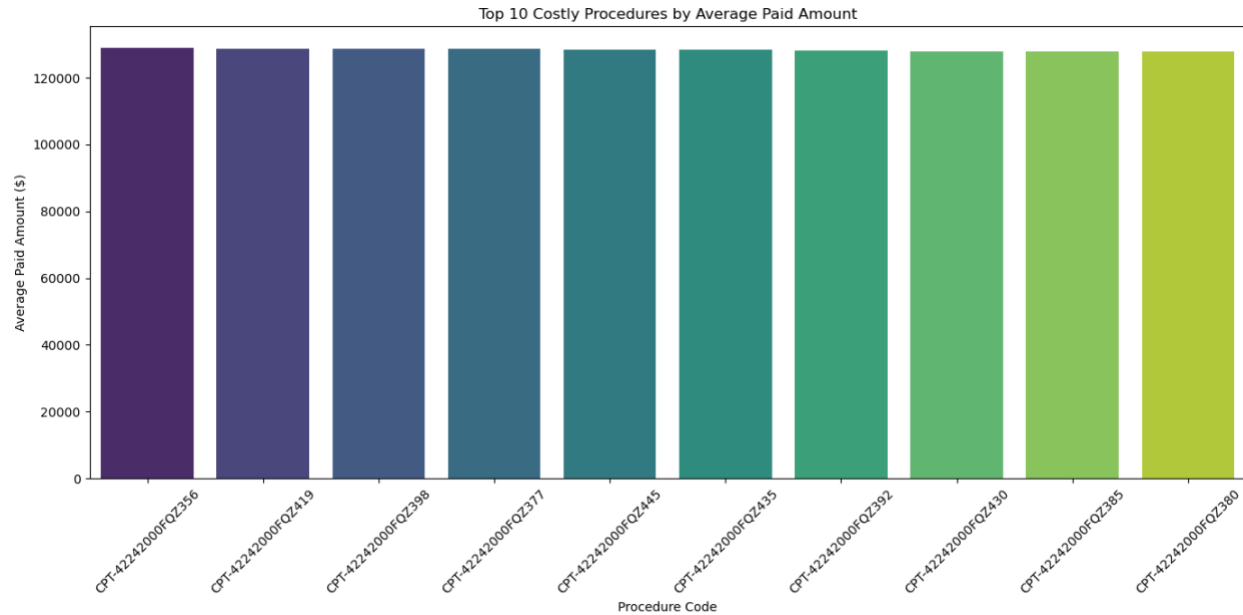
- Objective:** The primary goal was to analyze healthcare claims data to identify areas for cost reduction.
- Methods:** Utilized visualizations like heatmaps, bar charts, and box plots to examine costs by diagnosis, procedure, and demographic variables.

Key Findings:

1. Costly Diagnoses and Procedures:

- Identified specific diagnoses and procedures with the highest average paid amounts, signaling areas for potential cost management.



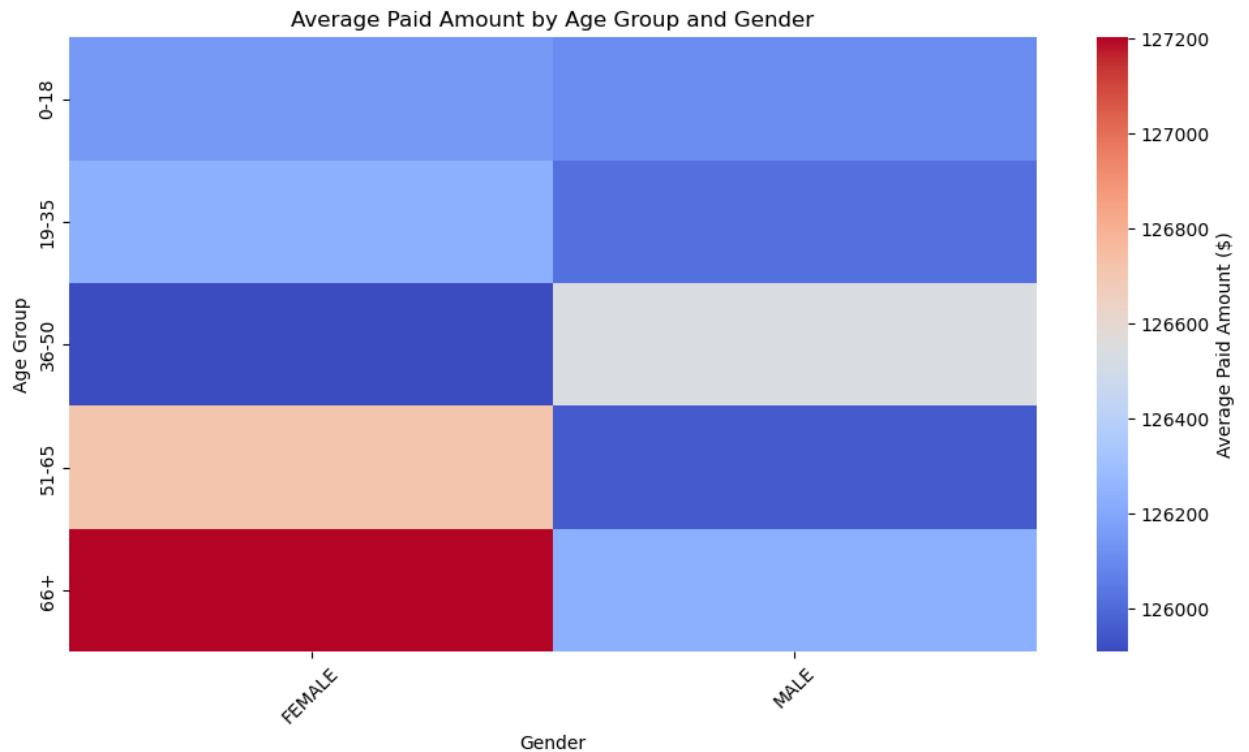


Top 5 High-Cost Claims by Diagnosis and Procedure

1. Diagnosis: ICD-J04AB30001, Procedure: CPT-42242000FQZ418: Average Paid Amount - \$818,092
2. Diagnosis: ICD-J01XE01001, Procedure: CPT-42242000FQZ443: Average Paid Amount - \$732,493
3. Diagnosis: ICD-J05AP01003, Procedure: CPT-42242000FQZ432: Average Paid Amount - \$723,347
4. Diagnosis: ICD-J01XB02001, Procedure: CPT-42242000FQZ368: Average Paid Amount - \$716,089
5. Diagnosis: ICD-J05AE08002, Procedure: CPT-42242000FQZ404: Average Paid Amount - \$715,942

These high-cost claims might indicate outlier cases that require further investigation or could be indicative of areas where disease management programs could be particularly effective.

2. Demographic Variations in Costs:



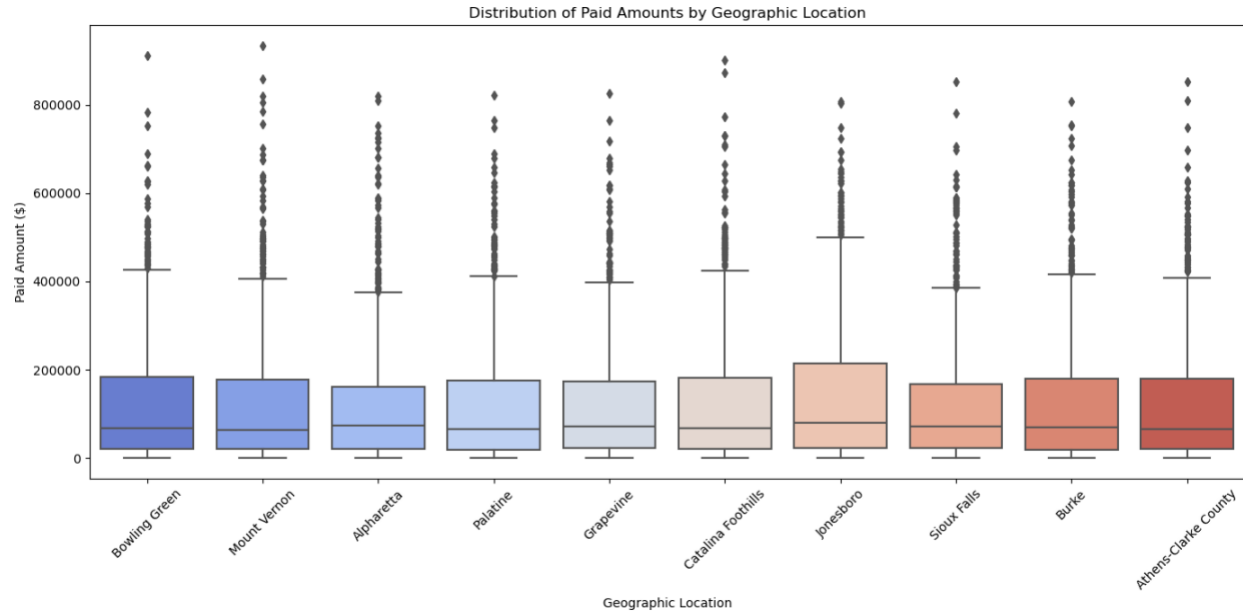
- Highlighted how costs vary by age and gender. Older age groups (51-65, 66+) tend to incur higher costs.
- Noted that females on average have slightly higher costs than males.

Average Paid Amounts by Gender

- Female: \$126,409
- Male: \$126,255

3. Geographical Cost Disparities:

- Detected significant variations in costs by location, suggesting regional factors or billing practices influencing costs.



4. Facility-Based Cost Variations:

- Determined certain healthcare facilities have higher than average costs, which could indicate opportunities for rate negotiations or billing reviews.

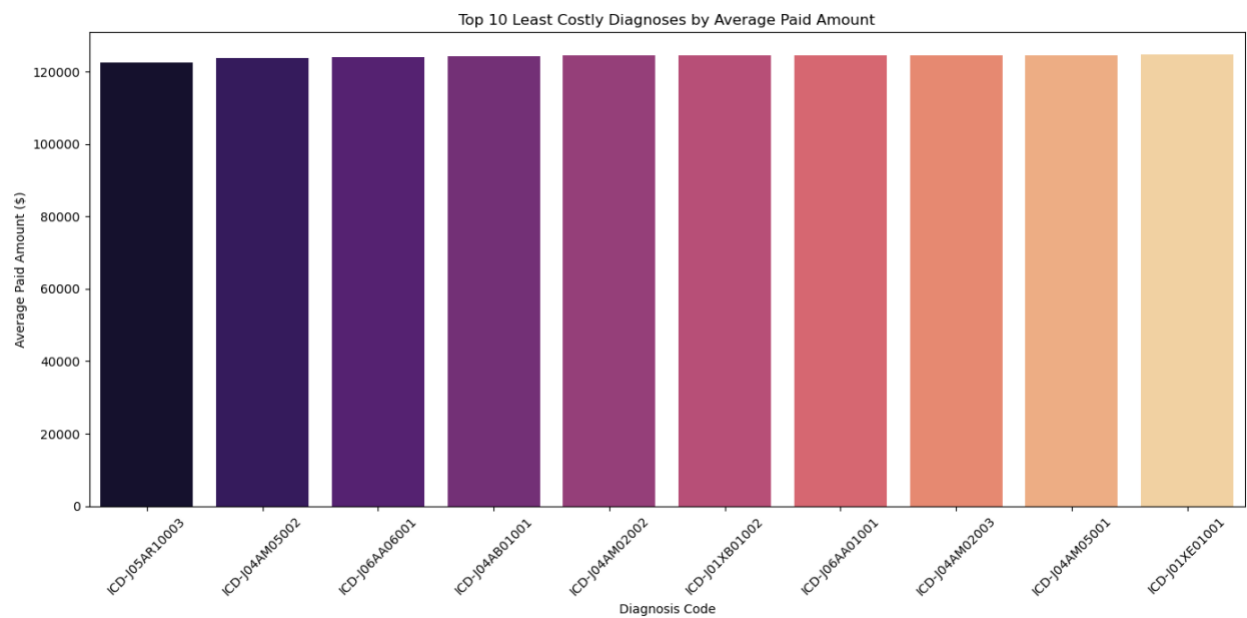
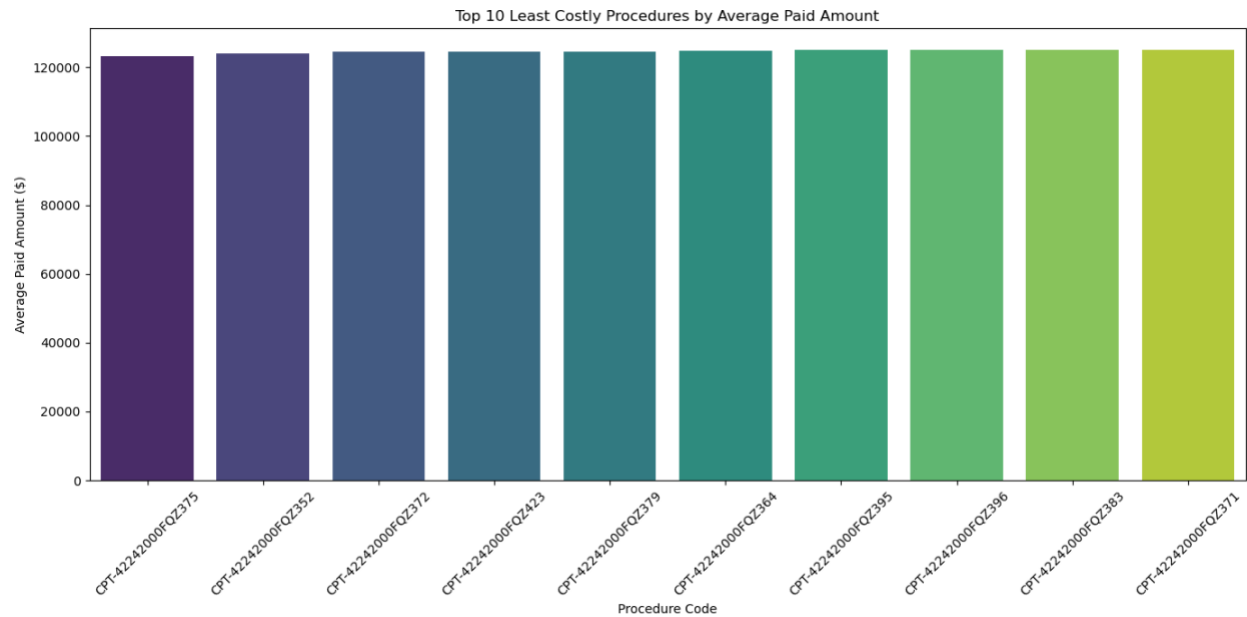
Top 5 Healthcare Facilities by Average Paid Amount

1. Mat Haven: Average Paid Amount - \$129,079 (19550 claims)
2. North Clairesit Du Grayscloud: Average Paid Amount - \$128,809 (183350 claims)
3. Bamphills: Average Paid Amount - \$128,512(19050 claims)
4. Forttown: Average Paid Amount - \$128,436 (17800 claims)
5. Soutown: Average Paid Amount - \$128,297 (18900 claims)

These facilities represent potential targets for cost control negotiations or reviews of their billing practices, given their high average costs.

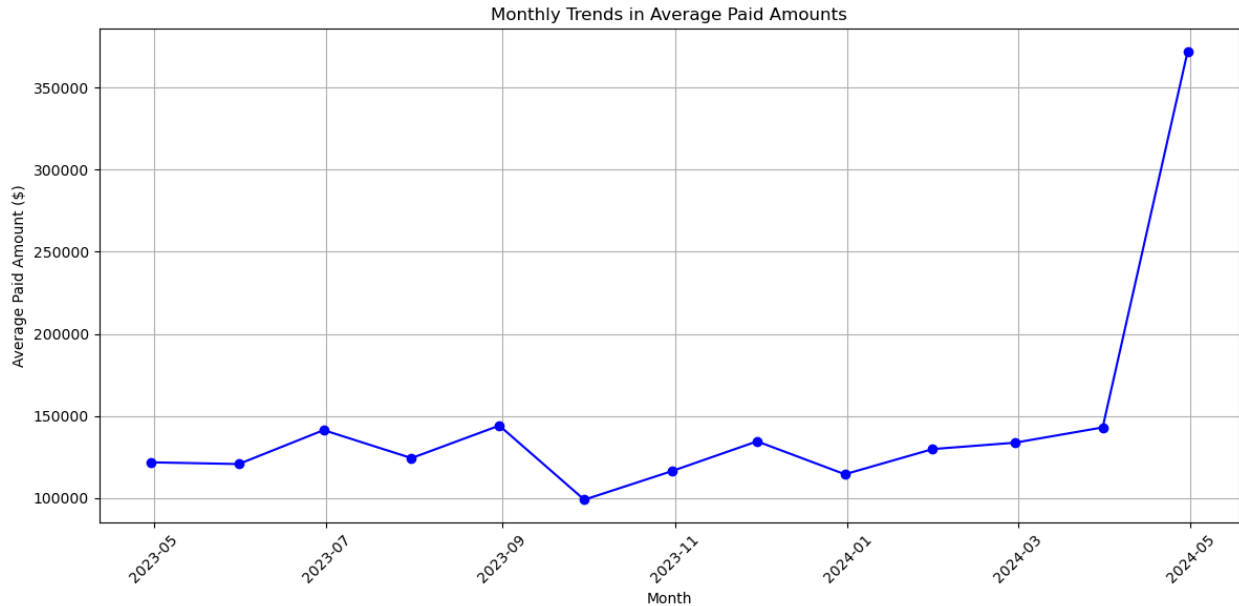
5. Least Costly Diagnoses and Procedures:

- Identified least costly diagnoses and procedures, which could provide insights into areas with efficient cost management.



6. Montly Trends in Average Paid Amounts.

The line graph below shows the monthly trends in average paid amounts for medical claims. You can observe any seasonal variations or specific months where the costs peak, which might indicate periods of higher healthcare utilization or changes in billing practices.



Recommendations for Action:

1. Negotiate with High-Cost Providers:

- Engage healthcare facilities with above-average costs in rate negotiations to bring down prices.

2. Review High-Cost Diagnoses and Procedures:

- Conduct utilization reviews to ensure costly diagnoses and procedures are necessary and cost-effective.
- Consider alternative treatment protocols that are clinically sound yet more cost-efficient.

3. Targeted Disease Management Programs:

- Develop or enhance disease management programs for the costliest medical conditions to improve patient outcomes and reduce long-term costs.

4. Regional Analysis:

- Investigate the cause of geographical cost disparities, potentially focusing on regional healthcare policy and provider networks.

5. Demographic-Specific Strategies:

- Tailor health plans and intervention programs to demographics more likely to incur higher costs, particularly the older age groups.

Further Analysis Needed:

- **Time Series Analysis:** Complete the analysis of cost trends over time to identify seasonal patterns or trends that could inform budgeting and resource allocation.
- **Insurance Plan Review:** Deep-dive into how different insurance plan types impact costs to determine if plan restructuring may yield savings.

Conclusion:

This data-driven approach to analyzing healthcare costs provides actionable insights for cost management strategies. By focusing on identified areas, healthcare insurers can potentially reduce costs while maintaining quality care.